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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/783,339 | 02/20/2004 | Brian Smidt | 10646.399US01 | 6914 |
| 7590 | 08/01/2006 | | EXAMINER | |
| Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903 | | | PAHNG, JASON Y | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3725 | |

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|----------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/783,339 | SMIDT ET AL. |
| | Examiner Jason Y. Pahng | Art Unit 3725 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 May 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 12-17 and 28-37 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 12-17 and 28-37 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Finality of the Last Office Action

In view of Applicant's remarks dated May 25, 2006, the last the finality of the last Office action is withdrawn. All amendments after the final rejection, including the amendment dated May 25, 2006 is, therefore, entered in accordance with MPEP 706.07(e).

A new Final Rejection is provided herein. Note that Applicant has received a Non-Final Office action on merits on July 28, 2005 for the claims submitted on June 29, 2005. After an interview held on October 27, 2005, Applicant submitted amendments which necessitated new grounds of rejection.

Interview Summary

Applicant alleges that an agreement was reached with regard to proposed amended claims during an interview dated October 27, 2005. Examiner, however, believes that no agreement was reached on the claims as submitted on October 31, 2005.

Even if a *prima facie* agreement had been reached with regard to proposed amended claims during the interview, pending further consideration and new search, any such agreement which may have been made with regard to any proposed claims during the interview dated October 27, 2005 is hereby withdrawn because upon further consideration during the full examination process, including careful review of the details

of the amended claims submitted on October 31, 2005, the amended claims do not overcome the prior art reference Zehr.

Claim Rejections - 35 USC § 112

In view of Applicant's remarks dated May 25, 2006, the claim rejections under 35 U.S.C. 112 is withdrawn.

Claim Objections

Claim 28 is objected to because of the following informalities: it appears that there is no antecedent basis for "the impact of perpendicular forces" because it is unclear which impact is the impact among the plurality of impacts generated by the plurality of forces. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12-15, 28-31, 34, 35, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Zehr (US 2002/0056773).

With regard to claim 12, Zehr discloses a grinding machine including:

1. a mill box having opposite sides (46, 48);

2. a grinding drum (4) having an axis of rotation (32);
3. an anvil (44, Figure 3; [0012]) having a wedge shaped portion ([0028]) and a rectangular portion (the rectangular top surface portion of the anvil 44 in Figure 2) located adjacent to the grinding drum (4);
4. the wedge shaped portion having a tapering surface extending from a first reference point to a second reference point, each of the first and second reference points being located a distance from the axis of rotation (32), wherein the second reference point of the tapering surface being located farther from the axis of rotation than the first reference point; and
5. the anvil (44, Figure 3; [0012]) having a length greater than the grinding width of the mill box (Figures 2 and 3).

With regard to claims 13, 28, 34, and 37, Zehr discloses an anvil (44, Figure 3) having a solid construction (no through holes or other similar structures that may weaken the structural integrity). Additionally, Zehr discloses a triangular cross-sectional shaped anvil ([0028]) which will always receive some force including some perpendicular force in one of the tapering surfaces.

With regard to claims 14 and 30, Zehr discloses clamp arms (60, Figure 3).

With regard to claims 15 and 31, Zehr discloses a conveyor feed table (Figure 3).

With regard to claims 29 (as well as can be understood) and 35, Zehr discloses an wedge shaped anvil ([0028]). As for the minimum clearance distance, the point which defines the minimum clearance of Zehr is called to be the first reference point. It

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is noted that Applicant has not defined the position of the first reference point other than the fact that the point is comprised by the anvil.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 16, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zehr (US 2002/0056773) in view of Hundt (US 5,975,443).

With regard to claims 16 and 32, Zehr discloses substantially all of the claimed structure with the exception of explicitly reciting a support surface for a feed table. In a closely related art, Hundt discloses a grinding machine with a support surface in order to support a feed table (3, Figure 3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Zehr with a support surface in order to support a feed table, as taught by Hundt. With regard to the second support surface, Zehr discloses a support surface (18) for the anvil.

With regard to claims 15 and 31, Hundt already discloses a feed table (3, Figure 2).

Claims 17 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zehr (US 2002/0056773) in view of Hundt (US 5,975,443) as applied above, further in view of Mankoff (US 2,209,277). Zehr (as modified) discloses substantially all

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of the claimed structure with the exception of the anvil support surface being located outside of the mill box. In a closely related art, Mankoff discloses an anvil support surface (the inner surface of the nut near 12) being located outside of the mill box in order to support the anvil from outside of the mill box. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Zehr (as modified) with an anvil support surface (the inner surface of the nut near 12) being located outside of the mill box in order to support the anvil from outside of the mill box, as taught by Mankoff.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zehr (US 2002/0056773). Examiner takes an Official Notice that use of a horizontal tapering surface is obvious to an ordinary skill in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to teach Zehr to use horizontal tapering surface, as such is well known and obvious in the art.

Response to Arguments

Applicant's arguments filed on May 25, 2006 have been fully considered and some arguments are found persuasive and a new Final Rejection is provided in response to those arguments but other arguments are not persuasive.

With regard to the limitation of "a rectangular portion," Examiner inadvertently failed to specifically point out this limitation in the last Office action. Therefore, a new Office action is provided herein and a new time period to reply is set which begins from this Office action.

Applicant alleges that an agreement was reached with regard to proposed amended claims during an interview dated October 27, 2005. Examiner, however, believes that no agreement was reached on the claims as submitted on October 31, 2005. Even if a *prima facie* agreement had been reached with regard to proposed amended claims during the interview, pending further consideration and new search, any such agreement which may have been made with regard to any proposed claims during the interview dated October 27, 2005 is hereby withdrawn because upon further consideration during the full examination process including careful review of the details of the amended claims submitted on October 31, 2005, the amended claims do not overcome the prior art reference Zehr.

Applicant's arguments filed October 31, 2005 have been fully considered but they are not persuasive. With regard to claim 12, Applicant argues that "Zehr does not teach or suggest an anvil oriented in the particular orientation recited in claim 12." However, there is no limitation in claim 12 which limits the orientation of an anvil to a particular orientation. It is noted that Applicant has not defined the position of the first reference point or the second reference point other than the fact that the points are comprised by the anvil.

Applicant presents no additional claims regarding the rest of the claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection, if any, presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

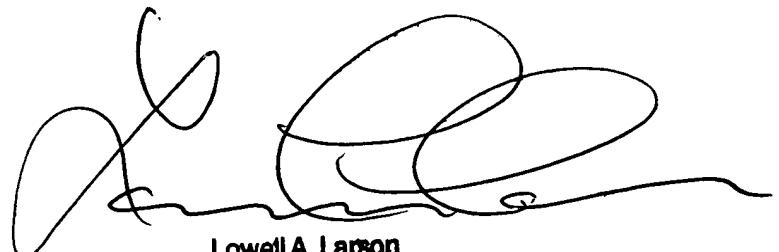
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Y. Pahng whose telephone number is 571 272 4522. The examiner can normally be reached on 9:00 AM - 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571 272 4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JYP



Lowell A. Larson
Primary Examiner